

HW_4

1. What is the difference between "Merge" and "Append" in Power Query?

'Merge' - adds by Columns (Horizontally)

'Append' - adds by Rows (Vertically)

2. How do you split a "Full Name" column into "First Name" and "Last Name"?

In the 'Home' tab there is a 'Split Column' Option
we can split it 'By Space'

3. What is "Pivot Columns" used for?

It turns values into Columns (column names)

4. How do you undo a step in Power Query?

Removing the step in the 'Applied Steps' section

5. What is the purpose of "Reference" vs. "Duplicate" in queries?

"Reference" - linked copy

"Duplicate" - Independent copy

6. Merge Orders.csv and Customers.xlsx on CustID (inner join).

Using 'Merge Queries' option

Matching on CustID

Choose 'Inner Join'

7. Pivot the Product column to show total Quantity per product.

Select 'Product' Column then choose 'Pivot Column' option
the aggregate 'Quantity'

8. Append two tables with identical columns (e.g., Orders_Jan.csv + Orders_Feb.csv).

By choosing 'Append Queries' then selecting both tables we can append two identical columns

9. Use "Fill Down" to replace nulls in the Email column with the previous value.

Select 'Email' column -> 'Transform' tab -> click 'Fill Down'

10. Extract the domain (e.g., "example.com") from the Email column.

Using 'Split Column' option and by delimitationg with '@' then taking the second part

11. Write M-code to merge queries dynamically based on a parameter (e.g., JoinType = "Inner").

```
= Table.NestedJoin(Orders, "CustID", Customers, "CustID", "NewTable", JoinType)
```

12. Unpivot a table with columns like "Jan_Sales," "Feb_Sales" into a "Month" and "Sales" format.

Using 'Unpivot Columns' option

13. Handle errors in a custom column (e.g., division by zero) using try...otherwise.

```
= Table.AddColumn(PrevStep, "SafeDivide", each try [Quantity] / [Price] otherwise 0)
```

14. Create a function in Power Query to clean phone numbers (e.g., remove dashes).

```
= (number as text) => Text.Remove(number, {"-"})
```

15. Optimize a query with 10+ steps—identify bottlenecks and simplify.